

HOUSING, COMMUNITY & ECONOMIC DEVELOPMENT

1330 BROADWAY, SUITE 937
OAKLAND, CALIFORNIA 94612-2509
TEL: 510/451-2552
FAX: 510/451-2554
draoakland@sbcglobal.net

CITY OF LONG BEACH HOUSING TRUST FUND STUDY

EXECUTIVE SUMMARY

Submitted to:

Ms. Elizabeth B. Stochl
Manager
City of Long Beach
Department of Community Development
Housing Services Bureau
110 Pine Avenue
Suite 1200
Long Beach, CA 90802

Submitted by:

David Paul Rosen & Associates 1330 Broadway, Suite 937 Oakland, CA 94612-2509 510.451.2552 draoakland@sbcglobal.net David Paul Rosen & Associates 3941 Hendrix Street Irvine, CA 92614-6637 949.559.5650 nlakebrown@cox.net



TABLE OF CONTENTS

	<u>PAGE</u>
Background a	nd Introduction1
Summary of C	Conclusions
Definition of	Affordable Housing4
Long Beach A	ffordable Housing Needs 6
Housing Trust	Fund Policy Guidelines, Practices and Program Administration9
2. 3.	Governance Structure9Program Development and Eligible Uses9Capital Planning10Administration10
Inclusionary H	Housing Policies and Analysis
1. 2.	Measuring the Cost of Inclusionary Housing in Long Beach
Land Residual	Values: How to Read These Charts
2. 3.	What is Land Residual Analysis?16What are the Incentive/Compliance Options?16What do the Bars Represent?17What do the Numbers and Dots Represent?17
Inclusionary H	Housing Production and In Lieu Fee Revenue Projections24
1. 2.	Inclusionary Housing Unit Production 24 Inclusionary In Lieu Fee Revenue Projections 25
Commercial [Development Linkage Fee
2 3.	Justifiable Nexus Fee.29Economic Impact of Nexus Fees29Land Residual Analysis31Commercial Development Linkage Fee Revenue Projections33



LIST OF TABLES

<u>TABLI</u>	<u>PAGE</u>
1.	Affordable Housing Incomes, Wages, Rents and Sales Prices in Long Beach, 2003
2.	Demographic and Housing Profile, City of Long Beach
3.	Owner Housing Prototype Projects, Long Beach Inclusionary Housing Analysis 13
4.	Renter Housing Prototype Projects, Long Beach Inclusionary Housing Analysis 14
5.	Projections of Affordable Housing Unit Production, Alternative Inclusionary Requirements, Major Project List, March 2003 and Inventory of Residential Sites, 2000-2005 Housing Element
6.	Projections of In Lieu Fees at Alternative Inclusionary Requirements, Major Projects List, March 2003 and Inventory of Residential Sites, 2000-2005 Housing Element
7.	Justifiable Nexus Fee Per Building Square Foot by Land Use, 2003
8.	Estimated Total Development Impact Fees Per Building Square Foot, Selected Non–Residential Land Uses, Long Beach and Selected Southern California Cities and Counties, 2003
9.	Estimated Residual Land Value Per Square Foot Site Area, With and Without Commercial Development Linkage Fee, Selected Non–Residential Land Uses, City of Long Beach, 2003
10.	Commercial Linkage Fee Projections Assuming Fees Ranging from \$2.00 to \$10.00 per Square Foot Based on Major Projects List, March 2003 33



LIST OF CHARTS

CHAF	<u>RT</u>	<u>PAGE</u>
1.	Land Residual Values Based on Alternative Incentive/Compliance Options, Owner Prototype 1: Small Lot Single–Family Detached	18
2.	Land Residual Values Based on Alternative Incentive/Compliance Options, Owner Prototype 2: Townhomes	19
3.	Land Residual Values Based on Alternative Incentive/Compliance Options, Owner Prototype 3: Type V Stacked Flat Condos	20
4.	Land Residual Values Based on Alternative Incentive/Compliance Options, Owner Prototype 4: Type I High–Rise Condos	21
5.	Land Residual Values Based on Alternative Incentive/Compliance Options, Renter Prototype 1: Townhomes	22
6.	Land Residual Values Based on Alternative Incentive/Compliance Options, Renter Prototype 2: Type V Stacked Flat Apartments	23



LONG BEACH HOUSING TRUST FUND STUDY EXECUTIVE SUMMARY

BACKGROUND AND INTRODUCTION

The City of Long Beach faces a housing crisis where the demand for affordable housing will far outpace the supply for the foreseeable future. Housing affordable to low income, and in many cases moderate income, households cannot be developed in Long Beach without housing subsidies. Current sources of subsidies identified and used by the City – primarily Community Development Block Grants, HOME funds, redevelopment agency tax increment housing set-aside funds – are insufficient to meet current and near-term demand for affordable housing, even when leveraged with non-local sources of subsidies and private financing, such as tax credits and tax–exempt bonds.

To address this problem, the City retained David Paul Rosen & Associates (DRA) to explore the potential of establishing a Housing Trust Fund for the City of Long Beach. A Housing Trust Fund is a dedicated, annually renewable source of subsidy dedicated for the development and preservation of affordable housing.

Long Beach also seeks to take advantage of leverage opportunities afforded by the passage of a statewide bond measure in November, 2002 which provides matching funds to California jurisdictions with housing trust funds in place.

The Long Beach Housing Trust Fund Study analyzes key tools the City may consider for producing affordable housing and/or generating funds to capitalize a Housing Trust Fund: inclusionary housing and a commercial development linkage fee.

Inclusionary housing programs require residential developers to provide a percentage of total units at below market rents or sales prices in conjunction with the market-rate units in the project. Inclusionary housing is used by 107 communities in California to increase the production of housing affordable to very low, low and/or moderate income households.

A commercial development linkage fee, also known as a nexus fee, is charged on non-residential development to mitigate the impact of the development on the housing market. In addition to generating demand for market rate housing, future employment growth will generate demand for housing affordable to lower and moderate income workers. Other cities in California, such as San Diego, Sacramento, Oakland and San Francisco, have established commercial development linkage fees to generate revenues for affordable housing development.



The Long Beach Housing Trust Fund Study consists of four parts:

- Part I: Housing Trust Fund Study Policy Guidelines, Practices and Program Administration This report provides an outline of the issues the City should consider as it develops its housing trust fund program, including the form of governance, uses of the funds, capital planning, and administration.
- Part II: Inclusionary Housing Implementation Policies and Practices This report reviews policies and program options the City should address if it chooses to develop an inclusionary housing program. Major policy issues include affordable housing set-aside requirements, applicability to specific projects, term of affordability, options for compliance, and incentives that may be offered to developers to offset a portion of the costs of complying with inclusionary requirements.
- Part III: Inclusionary Housing Economic Analysis This report analyzes the economic effect to developers of complying with a potential inclusionary housing program in the City of Long Beach. It also quantifies the value of various incentives that may be offered to housing developers and determines the extent to which they offset the cost of providing affordable units.
- Part IV: Commercial Development Linkage Fee Analysis This report quantifies the nexus between various types of non-residential development and the demand for affordable housing in Long Beach and estimates the maximum supportable nexus fee under law. It also evaluates the potential economic impact of a commercial/industrial nexus fee in Long Beach on future commercial/industrial development.



SUMMARY OF CONCLUSIONS

Key components of a Housing Trust Fund for Long Beach may be supported by new programs which assess both commercial and residential development.

Commercial Linkage Fee Conclusion

Development impact fees in the range of \$10 to \$15 per square foot for affordable housing and other uses, on top of current Long Beach fees, are supportable while maintaining land values in the range of recent market sales and appraised values (typically \$15 to \$25 per SF).

Inclusionary Housing Conclusions

The following inclusionary requirements are feasible for most housing prototypes in Long Beach:

Renter housing:

10% of units affordable for \$25,000 family income (family of four, 2003);

Owner housing:

15% of units affordable for \$50,000 family income (family of four, 2003).

In Lieu Fees

Inclusionary housing in lieu fees should be set at the economic equivalency of providing affordable unit on-site.

In lieu fee equals appx. \$14,000 per unit on all units for rental units at a 10% inclusionary requirement for families at \$25,000 income level.

In lieu fee equals appx. \$12,000 per unit on all units for owner housing at a 15% inclusionary requirement for families at \$50,000 income level.



DEFINITION OF AFFORDABLE HOUSING

The focus of this study is on housing affordable to working people and retired people on modest fixed incomes. Long Beach is home to a large number of low-wage workers. Decent affordable housing is out of reach for most of these workers.

This study analyzes two affordability standards for renters. The first is based on a household earning 45 percent of the current area median income in Los Angeles County, or approximately \$25,000 for a family of four in 2003. Some of the occupations earning less than this amount in Long Beach today are: fast food workers, garment workers, cashiers, nurses aides, security officers, janitors, telemarketers, dental assistants, truck drivers, receptionists, data entry clerks, sales agents and bookkeepers. The second affordability standard for renters is based on a household earning 60 percent of area median income, or approximately \$34,000 for a family of four.

The affordability standard for owners is based on a household earning 90 percent of the current area median income in Los Angeles County, or approximately \$50,000 for a family of four in 2003. Some of the occupations earning less than \$50,000 in Long Beach today are: firefighters, police officers, bank tellers, office clerks and registered nurses.

The study employs the commonly accepted federal and State affordable housing legal standard of renter households spending 30 percent of their gross income for rent and utilities. For owners, the legal standard employed is 35 percent of gross income for principal, interest, property taxes, insurance, utilities and homeowner association/maintenance costs.

Affordable housing incomes, wages, rents and sales prices in Long Beach based on the definitions used in the study are summarized in **Table 1** below.



Table 1
Affordable Housing Incomes, Wages, Rents and Sales Prices in Long Beach 2003

Percent of Area Median Income (AMI):	45% AMI	90% AMI
Annual Income, Family of Four (2003)	\$25,400¹	\$49,600 ²
Hourly Wage, Two Wage- Earners	\$6.00	\$12.00
Hourly Wage, One Wage- Earner	\$12.00	\$24.00
Affordable Rent ³	\$556	Not Applicable
Affordable Home Purchase Price ⁴	Not Applicable	\$142,000
Sample Occupations (earning that annual income)	Bank teller, hotel desk clerk, cashier, janitor, dental assistant, truck driver, receptionist, sales agent, bookkeeper	Police officer, firefighter, office clerk, licensed vocational nurse, registered nurse, teacher

¹Based on U.S. Department of Housing and Urban Development (HUD) 2003 very low income limits for a family of four pro rated to 45 percent of area median income.

Source: David Paul Rosen & Associates

²Based on California Department of Housing and Community Development (HCD) 2003 median income limits for a family of four pro rated to 90 percent of area median income.

³Assumes 30 percent of gross income spent on housing costs (rent plus utilities), less a \$79 monthly utility allowance (gas and electric) for a two-bedroom apartment.

⁴Assumes 35 percent of gross income spent on housing costs (principal, interest, property taxes, insurance, utilities and maintenance), a 7.5 percent mortgage interest rate and a 10 percent downpayment.



LONG BEACH AFFORDABLE HOUSING NEEDS

The City of Long Beach faces a housing crisis where the demand for affordable housing will far outpace the supply now and for the foreseeable future. Economic recovery has resulted in a rapid increase in housing prices and rents, increasing the burden on lower income working families and those with special needs. Residents in certain areas have high levels of housing overpayment and overcrowding. The City's housing stock is aging and in need of reinvestment. In addition to affecting the quality of life of the City's existing residents, the affordability of housing is a factor in the location decisions of major employers the City would like to attract to Long Beach. Further, the affordable housing crisis faced by Long Beach residents results in less household spending for local business, representing a drag on the local economy.

Some of the key affordable housing needs in Long Beach are highlighted below. **Table 2** provides a demographic and housing profile for Long Beach.

1. Overpayment on Housing

Housing costs in Long Beach are increasing at a faster rate than incomes, decreasing the affordability of housing for working families, and increasing household spending for local businesses.

- Nearly one-fourth of the City's renters, or about 22,000 households, spend more than half of their incomes for rent and utilities.
- These 22,000 families must choose each month between rent, food, medicine or clothing for their children.
- Only about 6,000 renter households, or about 7 percent of renter households, receive Section 8 housing assistance.

2. Owner Occupancy is Moving Further Out of Reach

As housing costs increase faster than rents, homeownership moves out of reach for more and more renter households.

- Only 41% of the City's households are owners; 59% are renters.
- Absentee ownership of single-family homes and small apartment buildings contributes to neighborhood decline.

3. Substandard Conditions

The City's housing stock is aging. As housing reaches 30 years of age or older, major rehabilitation is required to preserve the long-term physical condition of the units.

- 75% of the City's housing stock is more than 30 years in age; one-third is older than 50 years.
- Housing conditions are deteriorating despite City's considerable code enforcement and NIS efforts.
- Absentee ownership contributes to substandard conditions.

4. Overcrowding

Due to the high cost of housing in Long Beach relative to incomes, many households double-up or include extended family members to make housing more affordable, exacerbating overcrowding in the City.

- 1 in 5 renter households (about 10,000 families) live in severely overcrowded housing, representing the equivalent of seven persons in a two bedroom unit.
- 60 percent of existing rental housing consists of efficiency (studio) or onebedroom apartments.
- The majority of the City's population growth occurs in large families, exacerbating overcrowding.

5. Deteriorating Neighborhoods

Numerous factors contribute to severe deterioration and instability in certain Long Beach neighborhoods:

- Shortage of housing affordable to lower income residents;
- Absentee ownership;
- Substandard conditions;
- Insufficient code enforcement;
- Household overcrowding.



Table 2
Demographic and Housing Profile
City of Long Beach

	Number	Percent
Total Population	461,552	
Renter Households Owner Households Total Households	96,160 <u>66,928</u> 163,088	59.0% <u>41.0%</u> 100.0%
Average Household Size (Number of Persons)	2.77	
Renter Household Overpayment Paying More than 30% of Income for Housing ¹ Paying More than 50% of Income for Housing ²	44,100 22,000	46% 23%
Age of Housing Stock Units Over 30 Years of Age Units Over 50 Years of Age	120,300 57,000	74% 35%
Overcrowded Renter Households ³ Severely Overcrowded Renter Households ⁴	27,800 19,200	29% 20%
Households Earning Between \$25,000 and \$50,000 ⁵ Households Earning Less than \$25,000 ⁵ Households Receiving Section 8 Assistance	73,000 56,000 6,000	45% 34% 4%

Source: 2000 U.S. Census; City of Long Beach; David Paul Rosen & Associates

City of Long Beach Housing Trust Fund Study Executive Summary

¹ "Overpayment" defined by the U.S. Department of Housing and Urban Development (HUD) as paying more than 30% of gross household income for housing costs (rent plus utilities).

² "Severe overpayment" defined by HUD as paying more than 50% of gross household income for housing costs (rent plus utilities for renters).

³ Defined by HUD as more than 1.0 persons per room, or about 5 persons in a 2 BR unit.

⁴ Defined by HUD as more than 1.5 persons per room, or about 6 persons in a 2 BR unit.

⁵ Based on 2000 U.S. Census



HOUSING TRUST FUND POLICY GUIDELINES, PRACTICES AND PROGRAM ADMINISTRATION

A Housing Trust Fund is a dedicated, annually renewable source of funding for the development and preservation of affordable housing. The City of Long Beach should consider a number of issues as it develops its housing trust fund program. These include the governance structure, program development and eligible uses, capital planning, and administration.

1. Governance Structure

One of the most important decisions is the governance structure. DRA recommends that the City retain complete control over the governance and administration of a housing trust fund. Retaining control over governance and administration allows the City to meet its public policy interests with housing trust funds without need for approvals from independent entities that may have conflicting interests or opinions from the City. We expect that primary sources of funding for a housing trust fund would be public sources, such as redevelopment agency set-aside funds, HOME funds, and Community Development Block Grants. New potential sources of revenues for a housing trust fund would be commercial linkage fees and in lieu fees from an inclusionary housing program. It is unlikely that foundations and corporations will support funding. Because sources of funds for a housing trust fund are most likely to be public, the City should retain control over governance of the housing trust fund.

2. Program Development and Eligible Uses

When establishing a housing trust fund, most jurisdictions use general language when defining the purpose, and therefore the eligible uses, of a housing trust fund. For example, jurisdictions will state that a housing trust fund is used to support the production and preservation of affordable housing. By using such general language, the jurisdiction has flexibility to target a variety of housing needs.

Similar to defining eligible uses of funds, the City should broadly define eligible borrowers and/or grantees of the housing trust fund. Broadly defining eligible borrowers and grantees when initially developing a housing trust fund provides the City with flexibility to meet a variety of affordable housing needs over time.

The City can also target particular borrowers/grantees. In these cases, the City can skew criteria for the award of funds to these targeted groups. For example, if the City seeks to target nonprofit housing developers (rather than for-profit developers) with a NOFA for affordable housing development, then it can provide additional points to nonprofit housing developers in the criteria for awarding funds.

Typically, jurisdictions will target very low and low income households when funding rental housing. Jurisdictions will target low and moderate income households when funding ownership housing, both through owner housing development and home purchase assistance. It is usually difficult to provide affordable homeownership opportunities for very low income households because of the high per unit subsidies required to serve that targeted income group and the relative lack of sources of funds to leverage housing trust funds.

The City can structure its housing assistance to meet multiple public policy goals. For example, the City can focus on acquisition and rehabilitation as a strategy to provide affordable housing opportunities as well as encourage neighborhood revitalization. Community revitalization efforts can be geographically targeted to focus scarce resources on designated neighborhoods to enhance the impact of community development efforts.

3. Capital Planning

A key tool that the City can use to develop housing program priorities and a framework for housing trust fund spending is a long-term capital plan. A capital plan can assist the City with making program decisions based on the amount of projected revenues available from a housing trust fund and the sources of leverage financing available.

A capital plan incorporates projections of housing trust fund revenues, anticipated leverage, costs associated with affordable housing program options, and estimates of the number of households assisted by affordable housing program option. Ideally, capital plans represent three to five year rolling projections, revised annually.

4. Administration

Program administration issues include funding mechanisms, forms of financial assistance, underwriting and deal structuring, and asset management.

The two general categories of funding mechanisms are a notice of funds availability (NOFA) process or a request for proposals (RFP) process. Each method has its advantages and disadvantages. With an RFP process, the City announces that funds are available and sets a deadline for submittal of applications. In contrast with a NOFA, the City will review all proposals at one time and make funding decisions based upon the projects that best meet funding criteria. This process is especially useful if there is competition for funds. On the other hand, a NOFA process, under which funds are available on a first-come, first-served basis may have advantages if the City seeks to work with development partners to acquire sites. Because acquisition of sites is opportunity driven, an open window to access funds allows developers to seek the best opportunities.



There are two fundamental forms of financial assistance a jurisdiction can provide for affordable housing: grants or loans. The most appropriate form of financial assistance depends upon the uses of housing trust funds (e.g. predevelopment, construction or permanent financing, land banking, sponsor capacity building, operating subsidies).

All lenders underwrite loans to manage risk. Because the City is typically in a subordinate position, managing risk is a significant challenge. In addition, City staff is charged with preserving the safety of the City's funds while maintaining its role as the primary catalyst for affordable housing production. Factors to consider include the quality of underwriting standards, experience of the underwriter, and the quality and extent of information available. Important underwriting criteria include projected rental income and sales prices, loan to value ratio, debt coverage ratio, operating expenses, inflation factors, vacancy rates, replacement reserves and sponsor capacity.

Asset management is also a process and system of managing risk. Once a loan is funded, risk management shifts away from the underwriting and due diligence process and becomes a process of information gathering, monitoring, and undertaking appropriate strategies for addressing problems, if necessary. The quality of information and the capacity of City staff to provide management with timely, accurate and complete information determine the ability of public agencies to manage the risks inherent in their portfolios. When developing its asset management systems, the City should establish processes, practices and procedures that will guard against loss, ensure that the City's regulatory requirements are met, track repayment obligations to the City and provide underwriting staff with feedback on the underwriting standards they use to evaluate projects.



INCLUSIONARY HOUSING POLICIES AND ANALYSIS

Conclusion

The following inclusionary requirements are feasible for most housing prototypes in Long Beach:

Renter housing:

10% of units affordable for \$25,000 family income (family of four, 2003);

Owner housing:

15% of units affordable for \$50,000 family income (family of four, 2003).

Discussion

An inclusionary housing policy can be an important catalyst for the development of affordable housing. The City of Long Beach currently has a voluntary inclusionary housing program, which has not been successful in producing affordable housing in the City. Inclusionary housing ordinances can produce units directly or through in lieu fees, and can be an important source of subsidy to finance affordable housing development.

Key policy issues that should be addressed by an inclusionary housing program include income targeting, the percent of units to be set-aside as affordable, and the term of affordability for those units. The City should also address the applicability of the inclusionary requirements, geographically and in terms of minimum project size, and the effective date or phasing in of the requirements. Another issue is permitted compliance options, which may include on- and/or off-site construction of the affordable units, payment of in lieu fees and land dedication, among others.

Inclusionary housing imposes a prospective cost on development that can be partially to completely offset with economic incentives and alternative compliance options. DRA conducted an economic analysis which measures the cost of alternative inclusionary requirements against the value of incentive and alternative compliance "packages" to offset costs or otherwise provide incentives to market-rate housing. This analysis will assist policymakers in making informed decisions about inclusionary housing for Long Beach.

DRA analyzed the potential impact of alternative inclusionary housing requirements and incentives based on how housing actually gets built in Long Beach today. The cost to build market-rate housing in Long Beach today was carefully analyzed using six prototypical market rate housing developments representing typical rental and owner housing currently or prospectively being built in Long Beach.

Table 3 describes the four owner housing prototypes used in the economic analysis. **Table 4** describes the two rental housing prototypes analyzed.



Table 3 Owner Housing Prototype Projects Long Beach Inclusionary Housing Analysis 2003

	Owner 1	Owner 2	Owner 3	Owner 4
	Small Lot		Type V Stacked	Type I High-
PROTOTYPE	S-F Detached	Townhomes	Flat Condos	Rise Condos
Total Unit Count	10 Units	22 Units	50 Units	100 Units
Zoning	R-1-M, R-1-S, R-1-T	R-3-T	R-4-R, R-4-N	R-4-U
FAR	0.44	0.75	1.98	2.94
Resident Population	Family	Family	Family	Family
Product Type	SFD	Townhomes	Stacked Flats	Stacked Flats,
	2 Story, PUD	2 Stories	5 Stories	9 Stories
Construction Type	Type V	Type V with	Type V over	Type I over
	with Garages	Covered parking	Podium Parking	Underground
				Parking
Density (DU's/Acre)	15	25	70	100
Net Site Area (Acres)	0.67 Acres	0.88 Acres	0.71 Acres	1.00 Acres
Streets, etc @ % of Gross:	20.00%	0.00%	0.00%	0.00%
Gross Site Area	0.838 Acres	0.880 Acres	0.710 Acres	1.000 Acres
Units by BR Count				
Lofts	0	0	0	10
One Bedroom	0	0	7	10
Two Bedroom/1 Bath	0	13	8	10
Two Bedroom/2 Bath	4	0	25	50
Three Bedroom	6	9	10	20
Unit Size (Net SF)				
Lofts	0	0	0	800
One Bedroom	0	0	800	800
Two Bedroom/1 Bath	0	1,100	1,000	1,000
Two Bedroom/2 Bath	1,150	0	1,100	1,100
Three Bedroom	1,350	1,300	1,400	1,400
Four Bedroom	0	0	0	0
Manager's	0	0	0	0
Ave. (Exclud. Mgr's)	1,270	1,182	1,102	1,090
Building Square Feet				
Net Living Area	12,700	26,000	55,100	109,000
Type of Parking	Attached	1 Level	1 Level	2 Levels
7,500.1	Garages	Semi-Subterranean	Subterranean (1)	Subterranean (1)
	4,000 SF	7,508 SF	15,441 SF	30,724 SF
	200 SF/Space	28 Standard	57 Standard	113 Standard
		27 Compact	56 Compact	112 Compact
No. of Parking Spaces	20	55	113	225

(1) Plus 1 ground level parking. Source: David Paul Rosen & Associates.



Table 4
Renter Housing Prototype Projects
Long Beach Inclusionary Housing Analysis
2003

	Renter 1	Renter 2
		Type V Stacked
PROTOTYPE	Townhomes	Flats Apartments
T-4-1 Unit Count	22 11-34-	FO Lleite
Total Unit Count	22 Units	50 Units
Zoning	R-3-T	R-4-R, R-4-N
FAR	0.64	1.76
Resident Population	Family	Family
Product Type	Townhomes	Stacked Flats
	2 Stories	5 Stories
Construction Type	Type V	Type V
Density (DU's/Acre)	25	70
Land Area (Acres)	0.88 Acres	0.71 Acres
Units by BR Count		
One Bedroom	4	7
Two Bedroom/1 Bath	3	8
Two Bedroom/2 Bath	11	25
Three Bedroom	4	10
Unit Size (Net SF)		
One Bedroom	900	800
Two Bedroom/1 Bath	950	950
Two Bedroom/2 Bath	1,000	1,000
Three Bedroom	1,200	1,100
Average	1,011	984
Building Square Feet		
Net Living Area	22,250	49,200
Type of Parking	1 Level	1 Level
,	Semi-Subterranean	Subterranean (1)
	7,508 SF	15,441 SF
	28 Standard	57 Standard
	27 Compact	56 Compact
No. of Parking Spaces	55	113

(1) Plus 1 ground level parking.

Source: David Paul Rosen & Associates



1. Measuring the Cost of Inclusionary Housing in Long Beach

Inclusionary housing imposes a cost on residential development. The DRA study takes care to quantify the cost of imposing an inclusionary obligation on housing developers in Long Beach. The study also measures the economic value of various incentives and alternative compliance options the City may provide to offset this cost.

DRA used a land residual analysis approach to quantify the potential economic impact of inclusionary housing requirements in Long Beach. Land residual analysis is commonly used by real estate developers, lenders and investors to evaluate development financial feasibility and select among alternative uses for a piece of property. The land residual methodology calculates the value of a development based on its income potential and subtracts the costs of development and developer profit to yield the underlying value of the land. A land use that generates a negative land value is not financially feasible. Similarly, a use that generates a land value lower than the land seller is willing to accept is infeasible. Recent land sales ("market comparables") provide an indication of the range of land prices sellers may accept in Long Beach today.

Land residual analysis is the most realistic way to view the potential impact of inclusionary requirements on residential development in the City of Long Beach. Since developers and landlords charge the maximum rents and sales prices the market will bear, any increase in development costs resulting from government regulation, or other factors, will ultimately impact the price of land and/or profits to developers and owners. Increases in development costs do not lead to increases in rents or home prices, since these are governed by market forces of supply and demand. A reduction in developer profit margins does not necessary render a project infeasible. Developers typically have "threshold" profit and overhead requirements. These requirements are built into the development costs in this analysis.

In some market climates developers are willing to build, and lenders and investors are willing to finance, a development based on a "future value." One example of such "speculative" development is constructing apartments that may later be sold as condominiums.



2. Findings of the Economic Analysis

The findings of the land residual analysis are summarized in Charts 1 through 6 for the owner and renter prototypes, respectively. The findings indicate that the prototypes remain feasible with an inclusionary set-aside requirement, offset by one or more incentive packages.

Comparing the residual land values generated by the all market-rate prototypes with the various "packages" of inclusionary requirements, incentives and compliance alternatives provides an indication of the financial effect of the "package" upon the development economics of that prototype.

LAND RESIDUAL VALUES: HOW TO READ THESE CHARTS

1. What Is Land Residual Analysis?

Land residual analysis is commonly used by real estate developers and investors to evaluate development financial feasibility. The land residual methodology calculates the value of a development based on its income potential and subtracts the costs of development and developer profit to yield the underlying value of the land. A use that generates a negative land value, or a value below the price land sellers are willing to accept, is not financially feasible.

2. What Are the Incentive/Compliance Options?

DRA analyzed the various combinations of inclusionary requirements, incentives, and compliance options listed in the chart key based on the following definitions:

- <u>All options</u> require 10% of total units to be affordable to households at 45% of area median income for renters and 15% of total units to be affordable to households at 90% of area median income for owners, or approximately \$25,000 and \$50,000, respectively, for a family of four in Long Beach in 2003.
- <u>No offsets</u> means the developer provides the required affordable units through on-site construction identical to the market-rate units, with no offsets, incentives, or alternative compliance options.
- <u>25% and 50% density bonuses</u> add units onto the base density of the prototype. The affordability requirement is assumed to equal 10 percent of the higher post-bonus unit count.

- <u>Affordable unit modifications</u> assume affordable units incorporate the following cost-saving modifications to market-rate units: reduced unit sizes (to 700 square feet for a one-bedroom, 900 square feet for a two-bedroom, and 1,100 square feet for a three-bedroom); reduced interior finish quality; and reduced bathroom count (from two baths to one bath in two-bedroom/two-bath market rate units).
- Off-site compliance assumes the developer is allowed to develop the affordable units off-site, to benefit from lower land prices in different locations in the City.
- <u>Acquisition/rehabilitation compliance</u> assumes the developer is allowed to meet the affordable housing requirement by acquiring, rehabilitating, and preserving in perpetuity existing multi-family rental units in place of new construction. Substantial rehabilitation and relocation costs are assumed.

3. What Do the Bars Represent?

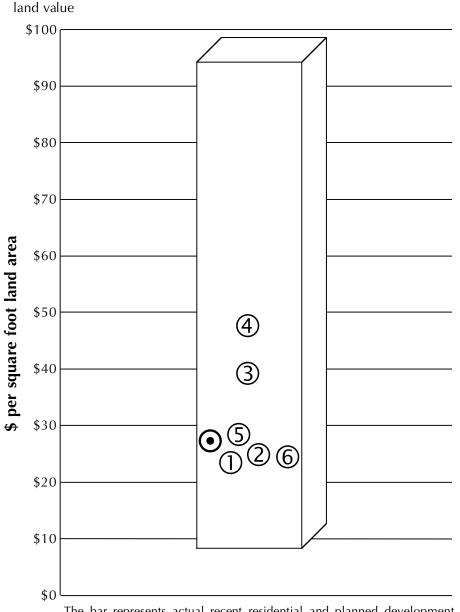
• Market land sales comparables are actual per square foot sales prices and appraised values for sites with residential and planned development zoning in Long Beach. The bars represent the predominate range of recent land sales prices and appraised values for residentially zoned land in Long Beach, as measured by the middle two-thirds of recent property sales and appraisals.

4. What Do the Numbers and Dots Represent?

- The bulls-eye dots represent the residual land value per square foot of site area for the housing prototypes assuming 100 percent market units, providing a benchmark for the feasibility of that housing type in today's market as reflected by the range of market land values.
- The numbered dots represent residual land values for alternative incentive/compliance options. DRA re-calculated the land residual assuming various "packages" of inclusionary housing requirements, incentives and alternative compliance measures designed to lessen the cost of inclusionary housing.
- When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

Chart 1

Owner Prototype 1: Small Lot Single-Family Detached





KEY: Incentive/ Compliance Options *

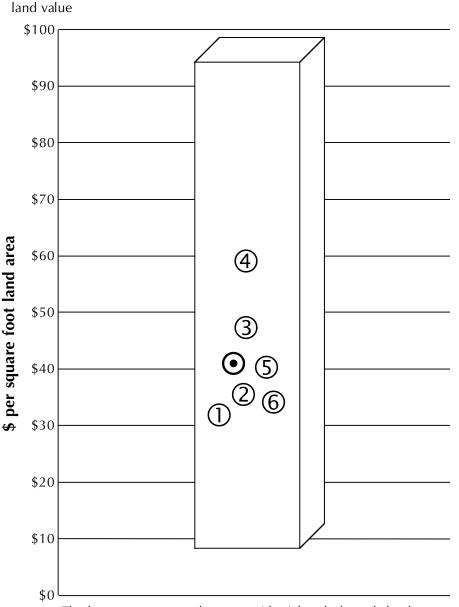
- ① No offsets
- ② Fee deferrals; affordable unit modifications
- 3 25% density bonus; fee deferrals; affordable unit modifications
- 50% density bonus; fee deferrals; affordable unit modifications
- Off-site compliance; fee deferrals; affordable unit modifications
- Multifamily acquisition/ rehabilitation compliance; fee deferrals;
 affordable unit modifications
- 100% Market-Rate Units

The bar represents actual recent residential and planned development land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

* All options require 15% of total units to be affordable to households at 90% (45% for package 6) of the area median income; approximately \$50,000 for a household of four in Long Beach, 2003.

Chart 2

Owner Prototype 2: Townhomes





KEY: Incentive/ Compliance Options *

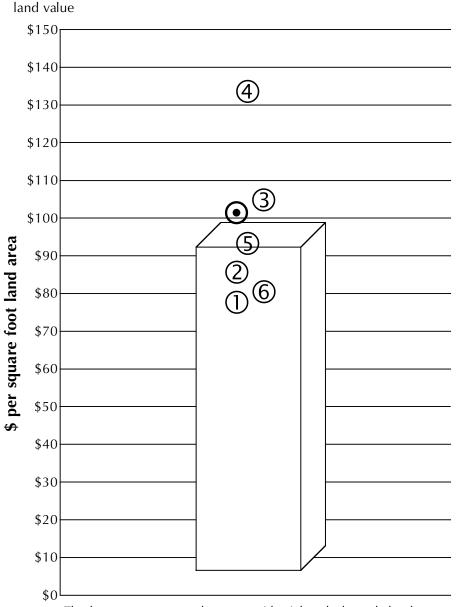
- ① No offsets
- Fee deferrals;
 affordable unit modifications
- 3 25% density bonus; fee deferrals; affordable unit modifications
- 50% density bonus; fee deferrals; affordable unit modifications
- Off-site compliance; fee deferrals; affordable unit modifications
- Multifamily acquisition/ rehabilitation compliance; fee deferrals; affordable unit modifications
- 100% Market-Rate Units

The bar represents actual recent residential and planned development land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

* All options require 15% of total units to be affordable to households at 90% (45% for package 6) of the area median income; approximately \$50,000 for a household of four in Long Beach, 2003.

Chart 3

Owner Prototype 3: Type V Stacked Flat Condos





KEY: Incentive/ Compliance Options *

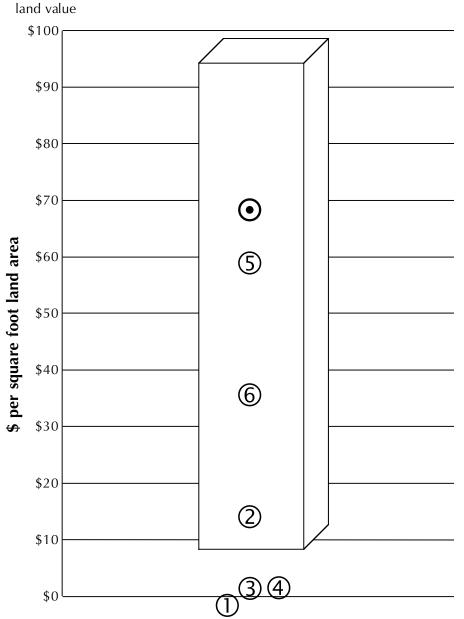
- ① No offsets
- ② Fee deferrals; affordable unit modifications
- 3 25% density bonus; fee deferrals; affordable unit modifications
- 9 50% density bonus; fee deferrals; affordable unit modifications
- Off-site compliance; fee deferrals; affordable unit modifications
- Multifamily acquisition/ rehabilitation compliance; fee deferrals; affordable unit modifications
- 100% Market-Rate Units

The bar represents actual recent residential and planned development land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

* All options require 15% of total units to be affordable to households at 90% (45% for package 6) of the area median income; approximately \$50,000 for a household of four in Long Beach, 2003.

Chart 4

Owner Prototype 4: Type I High-Rise Condos





KEY: Incentive/ Compliance Options *

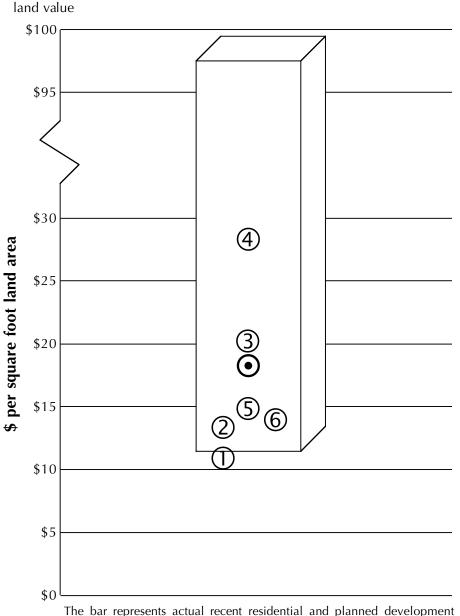
- D No offsets
- ② Fee deferrals; affordable unit modifications
- 3 25% density bonus; fee deferrals; affordable unit modifications
- 50% density bonus; fee deferrals; affordable unit modifications
- Off-site compliance; fee deferrals; affordable unit modifications
- Multifamily acquisition/ rehabilitation compliance; fee deferrals;
 affordable unit modifications
- 100% Market-Rate Units

The bar represents actual recent residential and planned development land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

* All options require 15% of total units to be affordable to households at 90% (45% for package 6) of the area median income; approximately \$50,000 for a household of four in Long Beach, 2003.

Chart 5

Renter Prototype 1: Townhomes





KEY: Incentive/ Compliance Options *

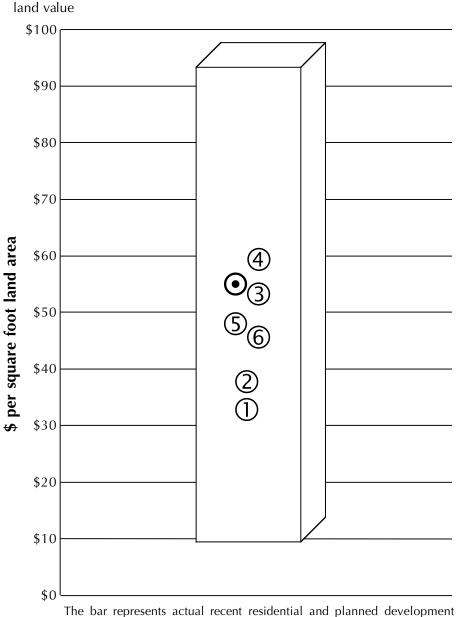
- D No offsets
- Pee deferrals;
 affordable unit modifications
- 3 25% density bonus; fee deferrals; affordable unit modifications
- 50% density bonus; fee deferrals; affordable unit modifications
- Off-site compliance; fee deferrals; affordable unit modifications
- Multifamily acquisition/ rehabilitation compliance; fee deferrals; affordable unit modifications
- 100% Market-Rate Units

The bar represents actual recent residential and planned development land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

* All options require 10% of total units to be affordable to households at 45% of the area median income; approximately \$25,000 for a household of four in Long Beach, 2003.

Chart 6

Renter Prototype 2: Type V Stacked Flat Apartments





land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should

KEY: Incentive/ Compliance Options *

- No offsets
- Fee deferrals; affordable unit modifications
- 25% density bonus; fee deferrals; affordable unit modifications
- 50% density bonus; fee deferrals; affordable unit modifications
- Off-site compliance; fee deferrals; affordable unit modifications
- Multifamily acquisition/ rehabilitation compliance; fee deferrals; affordable unit modifications
- 100% Market-Rate Units

* All options require 10% of total units to be affordable to households at 45% of the area median income; approximately \$25,000 for a household of four in Long Beach, 2003.

generally be reviewed as financially feasible.



INCLUSIONARY HOUSING PRODUCTION AND IN LIEU FEE REVENUE PROJECTIONS

1. Inclusionary Housing Unit Production

Table 5 provides projections of housing unit production based on the City of Long Beach Major Projects list, March 2003 and the City's Inventory of Residential Sites as incorporated in the City of Long Beach's 2000-2005 Housing Element. The projections assume all of the residential developments on the two lists are completed at the tenures (owner/renter split) and densities anticipated in the Major Projects List and Housing Element.

Table 5
Projections of Affordable Housing Unit Production
Alternative Inclusionary Requirements
Major Projects List, March 2003 and
Inventory of Residential Sites, 2000-2005 Housing Element

Inclusionary Requirement:	10	%	15%		20	%
, -	Renter	Owner	Renter	Owner	Renter	Owner
Major Projects List Entitlements Granted Preliminary Approvals Total ¹	20 <u>10</u> 30	12 <u>44</u> 56	30 <u>14</u> 44	18 <u>66</u> 84	40 <u>19</u> 59	24 <u>89</u> 112
Inventory of Residential Sites ²	91	14	105	21	182	28
Total	121	70	191	105	242	140

Source: City of Long Beach Major Projects List March, 2003; Inventory of Residential Sites, City of Long Beach 2000-2005 Housing Element; David Paul Rosen & Associates.

City of Long Beach Housing Trust Fund Study Executive Summary

¹ Assumes a total of 296 renter units and 562 owner units.

² Assumes a total of 912 renter units and 139 owner units.



2. Inclusionary In Lieu Fee Revenue Projections

Conclusions

Inclusionary housing in lieu fees should be set at the economic equivalency of providing affordable unit on-site.

In lieu fee equals appx. \$14,000 per unit on all units for rental units at a 10% inclusionary requirement for families at \$25,000 income level.

In lieu fee equals appx. \$12,000 per unit on all units for owner housing at a 15% inclusionary requirement for families at \$50,000 income level.

Discussion

In designing its inclusionary housing program, the City of Long Beach can choose to require on- or off-site construction of affordable units, or to permit developers to pay an in lieu fees as an alternative compliance measure. To ensure that developers do not have an incentive to pay in lieu fees rather than build inclusionary units, in lieu fees must be set at the economic equivalency of providing affordable unit on-site. If in lieu fees are set at amounts lower than this economic equivalency, then developers have a financial incentive to pay fees rather than build inclusionary units.

With rental developments, the economic equivalent of providing an affordable unit on-site is the affordability gap. The renter affordability gap is the difference between the total development cost of the unit and the amount of mortgage that the net cash flow of an affordable unit can produce. For the Type V Stacked Flat apartment prototype (a common type of rental development in Long Beach), the in lieu fee equals \$14,191 per unit (on all units) assuming a 10% inclusionary requirement targeting households at 45% of area median income.

With ownership units, the economic equivalent of providing an affordable unit on-site is the difference between the market price of the units in a development and the amount of mortgage and downpayment that a targeted household can afford. For the Type V Condominium prototype (a common type of owner development in Long Beach) the in lieu fee for owner housing equals \$12,114 per unit (on all units) assuming a 15% inclusionary requirement targeted to households earning 90% of area median income.

Table 6 provides projections of in lieu fees based on the City of Long Beach Major Projects list, March 2003 and the Inventory of Residential Sites from the City's 2000 to 2005 Housing Element. The projections are based on the following assumptions:

- all of the residential developments on the Major Projects and Housing Element Inventory of Residential Sites list are completed at the densities and tenures anticipated in the Major Projects List and Housing Element;
- all developers choose to pay the in lieu fee rather than provide inclusionary units; and
- the per unit amount of the in lieu fee is tied to the affordability gap analysis for the housing prototype considered most representative of the type of development anticipated on each site. For renter units, it represents the gap to development cost. For owner units, it represents the gap to market price, based on estimated sales prices for the owner housing prototypes (the same sales prices used in the land residual analysis described above).
- Based on the above assumptions, a 10 percent requirement on renter housing and a 15 percent requirement on owner housing would produce 226 units of affordable housing or the equivalent amount of in lieu fee revenues to City of \$27.3 million.



Table 6 Projections of In Lieu Fees at Alternative Inclusionary Requirements Major Projects List, March 2003 and Inventory of Residential Sites, 2000-2005 Housing Element

Millions of 2003 Dollars

Inclusionary Requirement:	10	10% 15%		15% 20		%
, -	Renter	Owner	Renter	Owner	Renter	Owner
Major Projects List Entitlements Granted Preliminary Approvals Total ¹	\$2.9 <u>1.3</u> \$4.2	\$1.1 <u>4.1</u> \$5.2	\$4.3 <u>\$2.0</u> \$6.3	\$1.6 <u>6.2</u> \$7.8	\$ 5.9 <u>8.2</u> \$14.1	\$ 2.1 <u>8.3</u> \$10.4
Inventory of Residential Sites ²	\$13.0	\$1.5	\$19.5	\$2.3	\$26.0	\$3.0
Total	\$17.2	\$6.7	\$25.8	\$10.1	\$34.4	\$13.4

Source: City of Long Beach Major Projects List March, 2003; Inventory of Residential Sites, City of Long Beach 2000-2005 Housing Element; David Paul Rosen & Associates.

¹ Assumes a total of 296 renter units and 562 owner units.

² Assumes a total of 912 renter units and 139 owner units.



COMMERCIAL DEVELOPMENT LINKAGE FEE

Conclusion

Development impact fees in the range of \$10 to \$15 per square foot for affordable housing and other uses, on top of current Long Beach fees, are supportable while maintaining land values in the range of recent market sales and appraised values (typically \$15 to \$25 per SF).

Discussion

The City of Long Beach retained David Paul Rosen & Associates (DRA) to prepare a nexus study examining the legality and basis for establishing a rational nexus between non-residential development and the need for affordable housing in the City of Long Beach. In addition to market rate housing, future employment growth will generate demand for housing affordable to lower and moderate income workers. Other cities in California, such as San Diego, Sacramento, Oakland and San Francisco, have established commercial development linkage fees, also known as nexus fees, to generate revenues for affordable housing development. Through payment of these fees, non-residential developers mitigate at least a portion of the impact of their developments on the housing market. The study analyzes the supportable fee in Long Beach based on the nexus between non-residential development and affordable housing.

The nexus analysis employs a tested nexus and gap methodology that has proven acceptable to the courts. The economic analysis uses a conservative approach to understate the legally supportable fee amount. Therefore, the housing impacts are likely even greater than indicated in the analysis. Using conservative assumptions, justified fee amounts are still above those likely to be considered reasonable and sustainable in the market.

The nexus analysis estimates the number of households by land use living in Long Beach and qualifying as very low, low or moderate income. DRA prepared a housing affordability gap analysis to calculate the development impact fee required to make housing affordable to these new Long Beach households. The affordability gap analysis calculates the capital subsidy required to develop housing affordable to families at specified income levels.

The results of the gap analysis were used to determine the fee amount by land use that would be required to develop housing affordable to the very low, low and moderate income households who will need to find housing in Long Beach in connection with new non-residential development in the City.



1. Justifiable Nexus Fee

The economic analysis estimated the supportable fees in **Table 7** under consistently conservative assumptions.

Table 7
Justifiable Nexus Fee Per Building Square Foot by Land Use 2003

Household	Supportable Nexus Fee Per Building Square Foot						
Income Category	Office	Light Mfg.	"Big Box" Retail	Community Retail	Hotel		
Very Low	\$11.84	\$8.88	\$7.40	\$13.32	\$7.40		
Low	\$6.40	\$5.12	\$6.40	\$12.80	\$2.56		
Moderate	\$5.40	\$1.20	\$1.20	\$3.00	\$0.60		
Total	\$23.64	\$15.20	\$15.00	\$29.12	\$10.56		

Source: David Paul Rosen & Associates.

2. Economic Impact of Nexus Fees

A number of communities in California have adopted linkage fees. Our interviews with developers indicated that fees in at least nine jurisdictions, some of which have been in place for more than fifteen years and through one or two full business cycles, have had no discernible impact on development. One reason may be that fee levels are relatively small as a percentage of development costs and rents, and therefore do not affect developers' decisions to build or not build, which are based on the strength of market demand. Even in San Francisco, where affordable housing linkage fees exceed \$14.00 per square foot and have been in place since 1985, there has been no measurable effect on the pace of commercial development in the city.

Nexus fees should be assessed in combination with all other fees in the City of Long Beach and compared with total development fees in other locations in the market area, along with other competitive factors. Long Beach City staff conducted a survey of development impact fees in selected Southern California cities and counties, summarized in **Table 8**.



Table 8
Estimated Total Development Impact Fees Per Building Square Foot Selected Non-Residential Land Uses
Long Beach and Selected Southern California Cities and Counties 2003

City	Retail	Office	Hotel	Restaurant	Warehouse/ Light Mfg.
Carson	\$0.42	\$0.42	\$0.42	\$0.42	\$0.33
Glendale	\$1.02	\$1.04	\$1.01	\$1.32	\$0.69
Long Beach	\$4.00	\$3.23	\$3.42	\$1.49	\$1.81
City of Los Angeles ¹	\$1.13 plus transp.	\$1.41 plus transp.	\$1.65 plus transp.	\$1.67 plus transp.	\$1.21 plus transp.
Los Angeles County	\$0.89	\$0.89	\$0.89	\$0.89	\$0.89
Pasadena	\$5.59	\$6.41	\$7.11	\$7.17	\$5.82
Santa Ana	\$10.28 plus sewer	\$10.28 plus sewer	\$11.20 plus sewer	\$11.20 plus sewer	\$9.71 plus sewer
Santa Monica	\$0.31	\$8.84	\$0.31	\$0.31	\$0.31
Torrance	\$1.54	\$1.54	\$1.54	\$1.54	\$1.54

Note: Fees are based on 50,000 square foot building prototypes.

Source: City of Long Beach staffs' survey of development impact fees; David Paul Rosen & Associates.

¹ City of Los Angeles transportation impact fee is calculated on a per trip/per project basis. City of Los Angeles development impact fees approximate or exceed those in the City of Long Beach when transportation impact fees are included.



3. Land Residual Analysis

DRA also evaluated the potential impact of a potential nexus fee on non-residential development using a land residual analysis methodology, as described above for the inclusionary housing analysis.

DRA calculated net operating income from a 100,000 square foot building prototype for each commercial land use examined based on estimated market rents, vacancy rates and operating costs. Net operating income was capitalized assumed capitalization rates ranging from 8.5 percent to 9.0 percent (based on recent capitalization rate data) to determine the value of the developed property. The capitalization rate is the ratio of net operating income to project fair market value, or sales price, exhibited in the market and reflects the rate of return required by investors in rental property. Total development costs are then subtracted from the capitalized value to yield the estimated residual land value. The resulting residual land values per square foot site area, at various assumed levels of a nexus fee, are summarized in **Table 9**.

DRA compared the derived residual land values with recent sales comparables and appraisal data for vacant land with commercial, industrial and planned development zoning in Long Beach. Commercial land sales comparables obtained from Dataquick Information Systems ranged from \$14 to \$54 per square foot, with a median value of \$28 per square foot. Industrial land sales comparables from Dataquick ranged from \$9 to \$64 per square foot, with a median of \$22 per square foot. Appraisals provided to DRA by the City of Long Beach documented sales comparables and appraised values for vacant sites with commercial and planned development zoning in 2002 and 2003 ranging from \$9 to \$30 per square foot, with a median of \$20 per square foot.

The findings of the analysis suggest that commercial development linkage fees in the range of \$10 per square foot for most uses, and in some cases as high as \$15 per square foot, are supportable in Long Beach while maintaining residual land values in the range of recent market sales comparables and appraised values. Since the economic impact of the fee on development is not dependent upon the use of the fee, this analysis can be applied to other development impact fees on non–residential development under consideration in the City of Long Beach.



Table 9
Estimated Residual Land Value Per Square Foot Site Area
With and Without Commercial Development Linkage Fee
Selected Non-Residential Land Uses
City of Long Beach
2003

Assumed						
Nexus Fee Per Bldg. SF	Office	"Big Box" Retail	Community Retail	Hotel	Light Mfg.	
No Fee	\$43	\$23	\$21	\$38	\$29	
\$2.00	\$40	\$22	\$20	\$34	\$28	
\$4.00	\$36	\$22	\$20	\$31	\$28	
\$6.00	\$33	\$21	\$19	\$28	\$27	
\$8.00	\$29	\$21	\$19	\$24	\$27	
\$10.00	\$26	\$20	\$18	\$21	\$26	
\$15.00	\$18	\$19	\$17	\$12	\$25	
\$20.00	\$9	\$18	\$16	\$4	\$24	

Note: Land residual analysis is based on 100,000 square foot building use prototypes.

Source: David Paul Rosen & Associates.



4. Commercial Development Linkage Fee Revenue Projections

As we discussed in DRA's analysis of appropriate revenue sources, the ability of a commercial linkage fee to raise funds for a housing trust fund is based on the applicability of linkage fee, the amount of the fee, and the level of commercial development.

Table 10 provides projections of linkage fee revenues at alternative fee levels based on the current pipeline of major development projects in Long Beach (from the City of Long Beach Major Projects list, March, 2003). The projections are based on fees ranging from \$2.00 to \$10.00 per square foot. Fees ranging from \$2.00 per square foot to \$10.00 per square foot are significantly lower than the justifiable linkage fees defined by the nexus analysis and are within the range of fees supportable in the market according to the land residual analysis.

The major projects list includes a total of 1.6 million square feet of commercial and industrial development. By comparison, building permits for commercial and industrial development in the City of Long Beach have averaged 450,000 square feet annually over the past ten years.

Table 10 Commercial Linkage Fee Projections Assuming Fees Ranging from \$2.00 to \$10.00 per Square Foot Based on Major Projects List, March 2003 (1)

Commercial Linkage Fee Amount	\$2.00/sf Fee	\$4.00/sf Fee	\$6.00/sf Fee	\$8.00/sf Fee	\$10.00/sf Fee
Projects, Entitlements Granted	\$1,772,824	\$3,545,648	\$5,318,472	\$7,091,296	\$8,864,120
Projected Projects	\$1,436,042	\$2,872,084	\$4,308,126	\$5,744,168	\$7,180,210
Total, All Projects	\$3,208,866	\$6,417,732	\$9,626,598	\$12,835,464	\$16,044,330

⁽¹⁾ Based on development pipeline as described in the City of Long Beach Major Projects list, March 2003.